

Japanese Science Community Telecon – 9/17/2013

Attendees: Hiroyuki Enomoto, Peter Griffith, Dan Hayes, Larry Hinzman, Hiroshi Hayasaka, Takeshi Ise, Eric Kasischke, Yuji Kodama, Libby Larson, Yojiro Matsuura, Rikie Suzuki Diane Wickland, Rapporteur: Elizabeth Hoy

Agenda

- Introductions (NIPR / IARC / ABoVE)
- Summary of Status of ABoVE - 20 minutes - Wickland / Kasischke
- Summary of Status of Japanese research (ongoing and planned) in the Arctic/boreal regions of western North America - 30 minutes or more as needed
- Discussion of Collaborations among US, ABoVE and Japanese scientists
- Discussion of Institutional collaborations

Introductions (NIPR / IARC / ABoVE)

During introductions of the representatives on the call, all groups expressed their desire that this meeting could be used to dialogue with one another and to begin investigating possible collaborations between the Japanese arctic research community and the research that would be sponsored by NASA through ABoVE.

Summary of Status of ABoVE

Eric Kasischke presented an overview on the ABoVE campaign: [ABoVE Briefing 17 Sep 2013 Japanese Science Community](#)

Following this presentation, a discussion followed. Topics addressed included the pre-ABoVE funded research projects and the data management strategy for ABoVE. It was mentioned that the ABoVE office is currently compiling a list of arctic and boreal relevant programs and projects, as well as assembling a set of geospatial datasets relevant to ABoVE.

Summary of Status of Japanese research

The Japanese researchers on the call discussed the National Institute of Polar Research's commitment to boreal and arctic research. Recently (2013), Japan became an observer country to the Arctic Council. In 2011, Japan also began funding the GRENE Project (<http://www.nipr.ac.jp/grene/e/>) to conduct arctic climate change research. The project is currently funded until 2016, and negotiations are ongoing to continue this funding into the future. As Japan has no land in arctic and boreal regions, international collaboration is important to Japanese researchers.

Professor Enomoto explained that the [GRENE Arctic Project](#) has four research targets; these targets could also represent opportunities for collaboration with ABoVE. The four strategic research targets are:

- 1) Understanding the mechanism of warming amplification in the Arctic
- 2) Understanding the Arctic system for global climate and future change
- 3) Evaluation of the impacts of Arctic change on weather and climate in Japan, marine ecosystems and fisheries
- 4) Projection of sea ice distribution and Arctic sea routes

To address these four target areas, 7 research projects were initiated, including a project to study change in terrestrial ecosystems of the pan-Arctic and effects on climate.

The current GRENE Project ends in March of 2016. There are currently ongoing discussions to implement a second 5-year phase to the GRENE Project. The decision to continue the research from the GRENE Project will be made by mid-2014.

Presentations by Japanese Researchers (powerpoint slides from these presentations are being obtained)

Following the summary of the overall status of the Japanese research in the arctic, individual researchers presented overviews of their current studies related to arctic and boreal regions.

Presentations included:

- “Study of functions of boreal vegetation for carbon cycle by satellite remote sensing” - Rikie Suzuki
- “Multi-decadal temperature oscillation and changes in forest biomass and production” – Yojiro Matsuura
- Forest fire and weather - Hiroshi Hayasaka
- Coupling a land surface model and a soil organic carbon model - Takeshi Ise

Following the presentations, it was noted that these research projects, and others like them, represent excellent examples of the types of research ABoVE will be conducting and offer good avenues for collaboration between ABoVE and the Japanese research community.

Discussion of Potential Collaborations

Following the presentations, potential collaborations with the Japanese science community were discussed. Based on the current progress of the ABoVE science definition team (SDT), it is projected that start dates for ABoVE projects will be in 2015 and that the overall project could run 5-7 years. Considering this schedule, ABoVE could either extend the research of GRENE, or coordinate with GRENE project scientists if Phase II is funded. The different approaches used by scientists within the two projects offer ways to learn from one another.

While the strong desire between the two groups to establish collaborations with one another was evident, the challenge in moving forward will be to establish mechanisms for coordination. To better understand the common interests of ABoVE and the GRENE Project, it would be helpful to the ABoVE planning team if a list of the current studies and funded investigators of the GRENE Project could be passed along to the ABoVE group (including investigator, project, geographic region, abstract, publications, etc.). Some of this information is provided in a brochure about GRENE (http://www.nipr.ac.jp/grene/e/grene_E.pdf), but it was asked if greater detail could be provided as it appears that not all projects are included in this brochure.

Next Steps

The Japanese researchers agreed to put together a list of GRENE Projects and pass it along to the ABoVE planning team. Additionally, the ABoVE SDT co-chairs will report on this meeting to the SDT. It was suggested that these two groups should continue to remain in contact with one another, and

suggestions to do this included having the Japanese research community review SDT draft documents and possibly opening science meetings to researchers from outside groups to allow greater discussion of arctic and boreal research. Larry Hinzman agreed to continue to act as a liaison between the two groups.